

Chapter 12 DNA and RNA

Section Review 12-3

Reviewing Key Concepts

Completion *On the lines provided, complete the following sentences.*

1. The three main types of RNA are _____, _____, and _____.
2. Copying part of a nucleotide sequence of DNA into a complementary sequence in RNA is called _____.
3. An enzyme that binds to DNA and separates the DNA strands during transcription is RNA _____.
4. During the process of _____, the information carried by mRNA is used to produce proteins.
5. Each tRNA molecule contains three unpaired bases, called the _____, which are complementary to one mRNA codon.

Reviewing Key Skills

6. **Comparing and Contrasting** How are DNA and RNA similar? How are they different?

7. **Comparing and Contrasting** How are the three types of RNA different?

8. **Hypothesizing** How would it benefit a cell to possess a sequence of DNA that could be transcribed and then edited into several different mRNA molecules?

9. **Applying Concepts** Suppose the DNA sequence GCTATATCG was changed to GCGATATCG. How would the products of transcription and translation be affected?

